

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

Floe International, Inc.;
and Wayne G. Floe,

Civil No. 04-5120 (DWF/RLE)

Plaintiffs,

v.

**MEMORANDUM
OPINION AND ORDER**

Newmans' Manufacturing Incorporated,

Defendant,

and

Newmans' Manufacturing Incorporated,

Counter-Claimant,

v.

Floe International, Inc.;
and Wayne G. Floe,

Counter-Defendants.

Chad Drown, Esq., Timothy E. Grimsrud, Esq., David J. F. Gross, Esq., James W. Poradek, Esq., and Lee M. Pulju, Esq., Faegre & Benson LLP, counsel for Plaintiffs.

Douglas J. Frederick, Esq., and Max C. Ramsey, Esq., Rider Bennett LLP, counsel for Defendant.

Introduction

This matter is before the Court on the issue of patent claim construction pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). In its Complaint, Plaintiffs Floe International, Inc., ("Floe"), and Wayne G. Floe assert that Newmans'

Manufacturing Incorporated (“Newmans”) made and sold snowmobile trailers that infringe United States Patent No. 5,738,379 (the “‘379 Patent”), a patent issued to Wayne Floe.

Background

Floe and Newmans, both Minnesota corporations, are direct competitors in the snowmobile trailer market. The ‘379 patent describes a trailer frame member specially adapted for hauling snowmobiles. Floe contends that Newmans’ SLED BED™ trailers infringe the ‘379 Patent. Newmans has counterclaimed for a declaratory judgment that the ‘379 Patent is invalid.

Discussion

I. Claim Construction Principles

Patent claim construction, i.e., the interpretation of the patent claims that define the scope of the patent, is a matter of law for the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995), *aff’d* 517 U.S. 370 (1996). Proper claim construction requires an examination of the intrinsic evidence of record, including the claims of the patent language, the specification, and the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The terms used in the patent are presumed to carry “the meaning that the term would have to a person of ordinary skill in the art at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) (citation omitted), *cert. denied*, 126 S. Ct. 1332 (U.S. Feb. 21, 2006). The specification is “the single best guide to the meaning of a disputed term.” *Id.* at 1315. The specification may prescribe a special

definition given to a claim term, or a disavowal of claim scope by the inventor. *Id.* at 1316. In such cases, the inventor's intention that is expressed in the specification is dispositive. *Id.* The court may use a dictionary or technical treatise to "assist in understanding the commonly understood meaning" of a term, so long as any meaning found in such sources does not contradict the definition that is found in the patent documents. *Id.* at 1322-23. In addition, the court may not import limitations from the specification into the claims. *Id.* at 1323.

Means-plus-function limitations are interpreted according to 35 U.S.C. § 112, ¶ 6, which "allows a patentee to recite a function to be performed as a claim limitation rather than reciting structure or materials for performing that function." *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1321 (Fed. Cir. 2003). The court's construction of a means-plus-function limitation follows a two-step approach. *Id.* First, the court must identify the claimed function, "staying true to the claim language and the limitations expressly recited by the claims." *Id.* (citations omitted). Once these functions are identified, the court must ascertain the corresponding structures in the written description that perform those functions. *Id.* "A disclosed structure is corresponding 'only if the specification or the prosecution history clearly links or associates that structure to the function recited in the claim.'" *Id.* (quoting *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997)). The structure must be necessary to perform the recited function. *Id.* (citations omitted). Whether certain claim language invokes 35 U.S.C. § 112, ¶ 6 is a question of law. *Personalized Media Communications, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 702 (Fed. Cir. 1998).

The Court presumes that an applicant's use of the term "means" in a claim limitation was intended to convey a means-plus-function limitation under § 112, ¶ 6. *Sage Prods., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1427 (Fed. Cir. 1997). This presumption is rebuttable, however, if the properly construed claim limitation itself recites sufficiently definite structure to perform the claimed function. *Id.* at 1427-28. On the other hand, absence of the term "means" creates a presumption that § 112, ¶ 6 has not been invoked, and that presumption may likewise be rebutted if the claim limitation is determined not to recite sufficiently definite structure to perform the claimed function.

Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1361 (Fed. Cir. 2000). In determining whether a claim term limitation recites sufficient structure, the court inquires into whether the "term, as a name for structure, has a reasonably well understood meaning in the art." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880-81 (Fed. Cir. 2000).

The parties have asked the Court to construe various claim terms of the '379 Patent. The Court will address the claim terms in the order that the parties addressed them at the *Markman* hearing.

II. The '379 Patent

The disputed claim language of the '379 Patent reads as follows:

1. For use as part of a trailer frame constructed of joined frame members for supporting an associated portion of a trailer deck, an integrally formed loading frame member comprising:
 - a deck support member having a predetermined length, a lower longitudinal surfacer and an associated longitudinal deck support surface;
 - a ramp member joined to said deck support member in a cooperative relation to said longitudinal deck support surface, said ramp member having a length substantially equal to said predetermined length, a

deck edge protecting surface extending upwardly from said deck support surface and having an upper edge, a lower portion having a longitudinal edge, and having a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface; and

a web member joined to said deck support member, along said predetermined length,

whereby said ramp member provides ease of sliding objects to the trailer deck while it protects the associated trailer deck edge from damage during loading or unloading of the trailer deck.

...

6. For use as part of a trailer frame constructed of joined frame member for supporting a trailer deck having opposed surfaces and edges, a frame member comprising:

a deck support member with an associated deck support surface;

a ramp member having a deck protective surface extending above said deck support surface, and having an upper edge, a lower portion having a longitudinal edge, and a ramp surface disposed between said upper edge and said longitudinal edge at a first predetermined angle to said deck protective surface; and

an elongated web member having a predetermined length substantially coextensive with and below said deck support member and joined to said deck support member at a second predetermined angle.

...

11. For use on a trailer having a frame structure to support a trailer bed used for loading and unloading and having a loading portion for use in loading vehicles from a loading surface, an improved loading frame member comprising:

trailer bed support means for supporting at least a loading portion of the trailer bed;

edge protection means coupled to said trailer bed support means for protecting the edge of the loading portion of the trailer bed, wherein said edge protection means has an upper edge and is positioned above and substantially perpendicular to said trailer bed support means for engaging the edge of the loading portion of the trailer bed; ramp means formed with said edge protection means for assisting in loading the vehicles when the frame structure is positioned for loading, wherein said ramp means has a lower surface and a ramp

surface disposed between said lower surface and said upper edge at a first predetermined angle to said trailer bed support means; and web means coupled to said trailer bed support means for joining the improved frame member to the frame structure.

(‘379 Patent, c. 6, ll: 52-c. 7, l: 9; c. 7, ll: 41-55; c. 8, ll: 12-35.)

A. Claim 1

1. “ramp member”

Newmans contends that the phrase “ramp member” should be construed as:

a structure that is joined to said deck support member in a cooperative relation that has a length substantially equal to said predetermined length, and consists of three structural components: (1) a deck edge protecting surface extending upwardly from said deck support surface and having an upper edge, (2) a lower portion having a longitudinal edge, and (3) a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface[.]

At the *Markman* hearing, Floe withdrew its proposed claim construction and requested that the Court either not interpret “ramp member,” or use Newmans’ proposed construction but substitute “includes” for “consists of.”

Floe contends that the phrase “ramp member” means a structure that includes, but is not limited to, the structure set forth in the ramp-member limitation. In support of this contention, Floe points to the definition of “ramp member” in Claim 1, which states:

 said ramp member *having* a length substantially equal to said predetermined length, a deck edge protecting surface extending upwardly from said deck support surface and having an upper edge, a lower portion having a longitudinal edge, and having a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface.

(‘379 Patent, c. 6, l: 61-c. 7, l: 3 (emphasis added).) Specifically, Floe contends that the intrinsic evidence indicates that “having” is an open-ended term. Additionally, Floe alleges that Newmans’ proposed construction would limit “ramp member” to the structure disclosed in the preferred embodiment. Newmans, on the other hand, contends that the term “having” does not carry the presumption of open-ended interpretation. Newmans further asserts that here, the patentee did not indicate that “having” is non-limiting. Newmans also contends that the “ramp member” element absolutely requires three structural components and urges the Court to reject any attempts by Floe to disregard any one of the three required limitations of “ramp member.”

The Court finds that it must first construe “having” before it can construe “ramp member.” The transitional word “having” indicates that a claim may be open or closed. *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l Inc.*, 246 F.3d 1336, 1348 (Fed. Cir. 2001). After examining the intrinsic evidence, the Court finds that “having” is an open-ended term. “Having” is used multiple times in Claim 1 in an open-ended context. For example, “a lower portion having a longitudinal edge” does not suggest that the lower portion only has a longitudinal edge. Instead, “having” indicates that the lower portion has at least a longitudinal edge. And “deck edge protecting surface extending upwardly from said deck support surface and having an upper edge” does not mean that the deck edge protecting surface only has an upper edge. Likewise, “having” indicates that the deck edge protecting surface has at least an upper edge, but is not limited to only having an upper edge. Further, Newmans’ proposed construction would limit ramp member to the structure disclosed in the preferred embodiment.

After concluding that “said ramp member having” is an open-ended construction, the Court construes “ramp member” using Newmans’ proposed construction, but substitutes “includes” for “consists of.” Thus, “ramp member” is construed as:

a structure that is joined to said deck support member in a cooperative relation that has a length substantially equal to said predetermined length, and includes three structural components: (1) a deck edge protecting surface extending upwardly from said deck support surface and having an upper edge, (2) a lower portion having a longitudinal edge, and (3) a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface.

2. “joined [in a cooperative relation]”

Floe contends that this term should be construed as “brought together or connected in a functional relationship.” Newmans, on the other hand, asserts that this term should be construed as “directly connected.” Floe contends that its construction is consistent with the way that “joined” is used in Claim 1. Additionally, Floe asserts that its construction is consistent with standard dictionary definitions, in which “join” means “to put or bring together so as to form a unit” or “to put or bring together into close association or relationship.” *See Merriam-Webster’s Collegiate Dictionary* 630 (10th ed. 2001); *American Heritage Dictionary* 460 (4th ed. 2001). Floe also asserts that Newmans’ proposed construction imports an unclaimed limitation—“directly”—into the term. Newmans, on the other hand, asserts that its construction of the term is consistent with the way “joined” is used in Claim 7 and in the specification. Additionally, Newmans contends that Floe disclaimed any type of non-directly connected structure in the prosecution history.

Here, the ordinary meaning of “joined” is apparent from the language in Claim 1. Claim 1 requires “a ramp member joined to said deck support member in a cooperative relation to said longitudinal deck support surface.” The Court finds that the ordinary meaning of “joined” in Claim 1 is “brought together or connected in a functional relationship.”

The Court rejects Newmans’ contention that Claim 7 is instructive regarding this term. In discussing the “longitudinal lower member” and the “lip member,” Claim 7 states: “a longitudinal lower member . . . joined along said elongated web member . . . ; and a lip member . . . joined to said longitudinal lower member” (‘379 Patent, c. 7, ll: 58-63.) Based on this language, Newmans contends that “joined” does not allow for intervening items. Rather, according to Newmans, “joined” means “directly connected.” Claim 7, however, does not describe “joined” in the same way as Claim 1. Specifically, Claim 7 does not use the phrase “in a cooperative relation,” and thus is not instructive. Thus, to add “directly” would add an unstated limitation to the term.

The Court also rejects Newmans’ assertions that the specification and drawings support construing “joined” as “directly connected.” The Court finds that Newmans’ request to include “directly” would import an unclaimed limitation into the term and limit the claim to the preferred embodiment. Finally, the Court rejects Newman’s assertion that Floe disclaimed any type of non-directly connected structure in the prosecution history. In particular, Newmans mischaracterizes the patentee’s intent by altering the prosecution history quoted in its brief. Additionally, Newmans refers to a statement in

the prosecution history that addressed Claim 11, not Claim 1. Thus, the Court finds that this evidence does not constitute a disclaimer.

3. “edge”

Floe asserts that “edge” should be construed as “border.” Newmans, on the other hand, contends that this term should be construed as “boundary or point where a surface begins or ends.” Both parties allege that the language in Claim 1 and dictionary definitions support their proposed constructions.

The Court rejects Floe’s assertion that an “edge” may be the border of a surface, but that “edge” is not necessarily limited to surfaces. Here, Claim 1 requires a ramp member having:

a deck edge protecting surface extending upwardly from said deck support surface and having an upper edge, a lower portion having a longitudinal edge, and having a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface[.]

(‘379 Patent, c. 6, l: 62-c. 7., l: 3.) Given this claim language, the Court finds that in order to have an “edge” there must be some surface that defines that edge. The Court notes that dictionary definitions are not particularly helpful because they support both parties’ proposed constructions. Thus, consistent with the claim language, the Court construes “edge” as “boundary or point where a surface begins or ends.”

4. “lower portion”

Floe contends that this phrase should be construed as “a portion of a structure that is physically located below another portion of the structure.” In support of its

construction, Floe maintains that the plain meaning of “lower portion” is a portion of a structure that is physically located below another portion of the structure. Floe asserts that the specification uses “lower portion” in this context, and thus supports a construction that gives “lower portion” its ordinary meaning. Floe also points out that its broad proposed construction is consistent with the Federal Circuit’s construction of “portion.” *See Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1348 (Fed. Cir. 2001) (construing “portion” as “a part of any whole, either separated from or integrated with it.”)

Newmans, on the other hand, asserts that this phrase should be construed as “a lower structural element that is one of three different structural components of the ramp member.” Newmans does not refute the asserted plain meaning of “lower portion.” Instead, Newmans maintains that the patentee disclaimed the plain meaning of “lower portion” in the prosecution history. The Court disagrees.

In support of its disclaimer argument, Newmans points to statements that the patentee made in response to a rejection by the Patent Trademark Office (“PTO”). Newmans, however, takes statements between the patentee and the PTO out of context. Further, Newmans asks the Court to rely on numerous statements and multiple inferences in the prosecution history in order to find that the patentee disclaimed the scope of “lower portion.” The prosecution history, however, does not refer to “a lower structural element that is one of three different structural components of the ramp member.” On this evidence, the Court does not find that the patentee clearly and unmistakably made such a disclaimer. Thus, consistent with the plain meaning of “lower portion” and the

specification, “lower portion” should be construed as “a portion of a structure that is physically located below another portion of the structure.”

5. “longitudinal edge”

Here, the parties agree that “longitudinal” means “lengthwise.” As discussed above, however, the parties disagree over the construction of “edge.” Floe’s proposed construction of edge, as stated above, is “border.” Thus, according to Floe, “longitudinal edge” means “an edge (i.e., border) extending along the length of an object or structure.” Newmans, as discussed above, asserts that an “edge” is a “boundary or point where a surface begins or ends.” Thus, according to Newmans, “longitudinal edge” should be construed as “longitudinal boundary or point where a surface begins or ends.”

Consistent with the Court’s construction of “edge,” as discussed above, the Court construes the phrase “longitudinal edge” as “longitudinal boundary or point where a surface begins or ends.”

6. “a”

The parties stipulate that that the phrase “a predetermined angle” means “one predetermined angle.” The parties disagree, however, as to how the word “a” should be construed in the phrase “a ramp surface.” Floe asserts that “a ramp surface” should be construed as “one or more ramp surfaces.” Newmans, on the other hand, contends that “a ramp surface” should be construed as “one ramp surface.”

In support of its construction, Floe contends that because Claim 1 is an open-ended claim, there is a presumption that “a ramp surface” means one or more ramp surfaces. Further, Floe alleges that this construction makes sense considering that objects

in general, and specifically ramp members, can have multiple surfaces. Newmans cites *Norian Corp. v. Stryker Corp.*, for the proposition that that the word “a” generally means “one or more” in open-ended claims, but that “that general rule does not apply when the specification or the prosecution history show that the term was used in its singular sense.” 432 F.3d 1356, 1359 (Fed. Cir. 2005). Newmans further contends that the patentee here used specific language to encompass the possibility of more than one item. Thus, according to Newmans, “a ramp surface” should be construed as “one ramp surface,” consistent with the construction of “a” in “a predetermined angle.” The Court agrees.

The patentee used specific claim language to encompass the possibility of more than one item. In two places, the ‘379 Patent claims “at least one light.” (‘379 Patent, c. 7, ll. 32-33; c. 8, ll. 9-11.) Thus, the patentee used the language “at least one” to encompass the possibility of more than one. The Court also finds that Floe deviates from giving “a” the same meaning in “a predetermined angle” that it proposes should be used in “a ramp surface.” Here, Claim 1 states “. . . and having a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle . . .” (‘379 Patent, c. 6, ll. 65-67.) The Court finds that if there is only “one predetermined angle,” then there is only “one ramp surface” pursuant to this claim language. Thus, the Court construes “a ramp surface” as “one ramp surface.”

7. “ramp”

Floe contends that the term “ramp” should be construed as “a structure that includes a flat sloping surface and an upper portion and a lower portion, where the structure provides ease of sliding objects onto a trailer deck.” Newmans, on the other

hand, contends that the term “ramp” should be construed as “uniformly sloping.” Floe alleges that its construction is consistent with the specification, which describes a “ramp” as a structure that has a sloped surface and assists in loading vehicles or other objects onto a trailer. Floe also contends that its construction is consistent with standard and technical dictionary definitions. In particular, Floe cites the definition in the *McGraw-Hill Dictionary of Engineering* (1984), which defines “ramp” as a “uniformly sloping platform, walkway, or driveway.” *See id.* at 470. Newmans also asserts that technical dictionary definitions support its construction and cites the same definition as Floe from the *McGraw Hill Dictionary of Engineering*.

Consistent with the specification and the technical dictionary definitions of “ramp,” the Court construes “ramp” as “a uniformly sloping platform that provides ease of sliding objects onto a trailer deck.”

8. “ramp surface”

Floe asserts that this phrase should be construed as “a surface of a ramp.” Newmans, on the other hand, contends that this phrase should be construed as “uniformly sloping surface.” Floe contends that its proposed construction is consistent with the plain meaning of “ramp surface.” As stated above, Newmans contends that because the word “ramp” means “uniformly sloping,” a “ramp surface” means a “uniformly sloping surface.” The parties appear to agree that “surface” does not need to be separately construed. Here, the Court finds that the ordinary meaning of “ramp surface” is “a surface of a ramp,” and therefore construes the phrase as such.

9. “disposed between”

Floe proposes that this phrase be construed as “arranged or placed in the space that separates two structures or points.” Newmans, however, contends that this phrase should be construed as “with one edge connected to the upper edge of the deck protective surface and the opposite edge connected to the longitudinal edge of the lower portion.” Floe asserts that its proposed construction is consistent with the plain meaning of the phrase “disposed between.” Floe also contends that dictionary definitions of “dispose” and “between” are consistent with its proposed construction. For example,

Merriam-Webster’s Collegiate Dictionary 109 (10th ed. 2001), defines “between” as “in the time, space, or interval that separates : in intermediate relation to[,]” and “dispose” as “to put in place : set in readiness : ARRANGE[.]” Floe also points out that the Federal Circuit has defined “between” to mean “in or through the space that separates (two things).” *See Elekta Instruments S.A. v. O.U.R. Scientific Int’l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000). Additionally, Floe contends that its proposed construction is consistent with the specification.

Newmans, on the other hand, does not disagree that Floe’s construction is consistent with the plain meaning of the phrase “disposed between.” Instead, Newmans asserts that the prosecution history contains a clear disclaimer of scope. Newmans first asserts that various choices by the patentee in drafting various claims of U.S. Patent 5,421,612 (the ‘612 Patent”), to which the ‘379 Patent claims priority, support its proposed construction. But aside from being a different patent from the one at issue here, Newmans’ arguments regarding the ‘612 Patent are based on ambiguous and speculative

inferences. These inferences do not constitute a clear disclaimer of the plain meaning of the phrase “disposed between.” Additionally, Newmans asserts that the patentee disclaimed the plain meaning of “disposed between” when, after his claims were rejected, the patentee amended the claims to read “disposed between” instead of “disposed.” (*See* Decl. of Douglas J. Frederick in Support of Newmans’ Claim Constructions (“Frederick Decl.”) at ¶ 3, Ex. B at FL000175-77.) Further, Newmans asserts that in amending the claims, the patentee distinguished Pittman on the ground that the “ramp surface” in Pittman “is joined at only one edge” to the deck protective surface “and has one edge unconnected.” Thus, according to Newmans, the “ramp surface” of Pittman is not “disposed between” anything because it “has one edge unconnected.”

The Court, however, disagrees with Newmans that the patentee’s response to the Examiner’s rejection unequivocally disclaimed a construction that would “encompass a ramp surface connected at one edge to the upper edge of the edge protecting surface and having the opposite edge of the ramp surface left as an unconnected edge.” (Defendant’s Opening Markman Brief at 24.) The Court finds that the patentee made the relevant amendments to clarify that, unlike Pittman, Claims 1 and 6 require an inclined ramp surface. Here, the patentee never clearly indicated that “disposed between” should be defined as Newmans asserts. Thus, consistent with the plain meaning of the phrase “disposed between,” the Court construes the phrase as “arranged or placed in the space that separates two structures or points.”

10. “angle less than ninety degrees”

Floe asserts that this phrase should be construed as “a geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line, where the measured angle between the two rays or two planes is less than ninety degrees.” Newmans, on the other hand, contends that this phrase should be construed as “slope less than ninety degrees.” Floe asserts that its proposed construction is consistent with the ordinary and accustomed meaning of “angle” as defined by dictionaries. Floe also asserts that Newmans’ proposed construction is not mathematically precise because, in some cases, “angle” and “slope” measure different things. Newmans, on the other hand, contends that the prosecution history supports its construction. Specifically, Newmans points to a statement that the Examiner made in rejecting Claims 1, 6, and 11 as anticipated by Pittman. The Examiner stated, “Pittman shows . . . a ramp surface 21a disposed at an angle less than 90° to the support member (claim 1; note, 0° is an angle less than 90°)” (Frederick Decl. at ¶ 3, Ex. B at FL000170.)

Here, Claim 1 requires that the ramp member have “a ramp surface disposed between said upper edge and said longitudinal edge at a predetermined angle less than ninety degrees to said deck support surface and arranged to protect an edge of a deck to be supported by said deck support surface.” (‘379 Patent, c. 6, l: 65-c. 7, l: 3.) The Court finds that this phrase should be construed in accordance with its ordinary and accustomed meaning. Thus, the Court construes this phrase as “a geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes

emanating from a common line, where the measured angle between the two rays or two planes is less than ninety degrees.” The Court recognizes, however, that the prosecution history does not foreclose the possibility that a zero degrees angle could fall within the confines of the claim language.

B. Claim 6

1. “ramp member”

The claim construction issues for “ramp member” in Claim 6 are identical to those in Claim 1. The only difference in the claims is that the ramp surface in Claim 6 is at an angle relative to the deck edge protective surface instead of, as in Claim 1, at an angle relative to the deck support surface. Consistent with the Court’s reasoning in Claim 1, the Court construes “ramp member” in Claim 6 as:

a structure that includes (1) a deck edge protective surface extending above the deck support surface, where the deck edge protective surface has an upper edge, (2) a lower portion that has a longitudinal edge, and (3) a ramp surface that is disposed between the upper edge of the deck edge protective surface and the longitudinal edge of the lower portion, wherein the ramp surface is at an angle to the deck edge protective surface.

2. “edge”

Consistent with the Court’s reasoning above, the Court construes “edge” as “boundary or point where a surface begins or ends.”

3. “lower portion”

Consistent with the Court’s reasoning above, the Court construes “lower portion” as “a portion of a structure that is physically located below another portion of the structure.”

4. “longitudinal edge”

Consistent with Court’s reasoning above, the Court construes “longitudinal edge” as “longitudinal boundary or point where a surface begins or ends.”

5. “a”

Consistent with Court’s reasoning above, the Court construes “a ramp surface” as “one ramp surface.”

6. “ramp”

Consistent with Court’s reasoning above, the Court construes “ramp” as “a uniformly sloping platform that provides ease of sliding objects onto a trailer deck.”

7. “ramp surface”

Consistent with Court’s reasoning above, the Court construes “ramp surface” as “a surface of a ramp.”

8. “disposed between”

Consistent with the Court’s reasoning above, the Court construes “disposed between” as “arranged or placed in the space that separates two structures or points.”

9. “angle”

Floe contends that, consistent with its proposed construction of the phrase “angle less than ninety degrees” in Claim 1, “angle” should be construed as “a geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line.” Newmans, on the other hand, consistent with its arguments above, contends that “angle” should be construed as “slope.” Consistent with the Court’s reasoning above, the Court construes “angle” as “a geometric figure or

arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line.”

10. “a first predetermined angle”

The parties agree on the meaning of “a first predetermined.” But the parties disagree on the meaning of “angle.” Floe contends that this phrase should be construed as “a predetermined geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line.” Newmans, on the other hand, asserts that this phrase should be construed as “a first predetermined slope.” Consistent with the Court’s reasoning above in construing “angle,” the Court construes this phrase as “a predetermined geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line.”

11. “elongated”

Floe contends that this term should be construed as “stretched out, extended, or lengthened.” Newmans, on the other hand, asserts that this term should be construed as “a web member that has a height from bottom to deck bearing surface that is greater than other frame members.” Floe alleges that its proposed construction is consistent with the ordinary meaning of “elongated” and that Claim 6 uses this ordinary meaning. Floe also contends that its proposed construction is consistent with standard dictionary definitions that define “elongated” as “stretched out” and “extended; lengthened.” *See Merriam-Webster’s Collegiate Dictionary* 375 (10th ed. 2001); *Random House Dictionary of the English Language* 633 (2d ed. 1987).

Newmans, on the other hand, contends that its proposed construction is consistent with the specification's description of the preferred embodiment. Specifically, Newmans points out that the specification states, “[c]hannel member 18 can be 3.5 inch [sic] from bottom to deck bearing surface 72, and deck edge protection surface 76 will be high enough to cover the edge of the selected deck material.” (‘379 Patent, c. 5, ll: 35-38.) Additionally, Newmans points out that the specification refers to all frame members having the same height. Finally, Newmans contends that increasing the height of the web member, as compared to other frame members to be used, improves the visibility of the lights that are mounted to the elongated web member. For these reasons, Newmans contends that its proposed construction is consistent with the specification.

The Court finds that Claim 6 uses the ordinary meaning of “elongated.” Here, Claim 6 requires, “an elongated web member having a predetermined length substantially coextensive with and below said deck support member and joined to said deck support member at a second predetermined angle.” (‘379 Patent, c. 7, ll: 52-55.) The Court finds that Newmans’ proposed construction would limit the claim to the structure disclosed in the preferred embodiment. Thus, consistent with the ordinary meaning of “elongated,” the Court construes this term as “stretched out, extended, or lengthened.”

C. Claim 11

1. “ramp means”

The parties disagree over whether this phrase is a means-plus-function limitation. Floe contends that “ramp means” is a means-plus-function limitation and thus subject to 35 U.S.C. § 112, ¶ 6. Specifically, Floe supports its contention by pointing out that the

claim is in means-plus-function format, that the prosecution history reveals that the patentee believed that the claim was a means-plus-function claim, and that Newmans, until recently, and Newmans' expert believed that the claim was a means-plus-function limitation. Floe originally asserted that the phrase "ramp means" should be construed as "the corresponding structure for carrying out the ramp means function is a ramp such as that shown by structure 74 in figure 10. The corresponding structure includes structures that are equivalent to structure 74." But at the *Markman* hearing, Floe suggested that the Court adopt Newmans' proposed construction, which avers that the corresponding structure is illustrated in figures 3 and 10 and described in c. 5, ll: 20-40 of the patent. Specifically, Newmans contends that this phrase should be construed as follows:

If "ramp means" in claim 11 is truly a "means-plus-function" claim element, then the corresponding structure is illustrated in figure 3 and figure 10 of the '379 patent, and is described in c. 5, ll. 20-40. It is Newmans' position that given the structure described in the "ramp means" claim element of claim 11, "ramp means" must be construed in light of the construction of its structural components as set forth herein.

Newmans refutes that the use of the phrase "ramp means" is a means-plus-function limitation. Newmans acknowledges that the use of the word "means" presumes that the patentee intended to invoke the statutory mandates for means-plus-function clauses. Additionally, the parties agree that the claimed function is "for assisting in loading the vehicles when the frame structure is positioned for loading." ('379 Patent, c. 8, ll: 26-32.) Newmans, however, refutes that "ramp means" is a means-plus-function limitation, alleging that the claim language recites sufficient structure or material for performing that function. Specifically, Newmans points to the claim

language that states, “wherein said ramp means has a lower surface and a ramp surface disposed between said lower surface and said upper edge at a first predetermined angle to said trailer bed support means.” (*Id.*)

The Court disagrees. Here, Claim 11 requires, “ramp means formed with said edge protection means for assisting in loading the vehicles when the frame structure is positioned for loading, wherein said ramp means has a lower surface and a ramp surface disposed between said lower surface and said upper edge at a first predetermined angle to said trailer bed support means[.]” (‘379 Patent, c. 8, ll: 26-32.) Although the claim language describes some structure, the claim does not recite sufficient structure to perform the undisputed function of assisting with the loading. Thus, the Court finds that this language does not overcome the presumption that this is a means-plus-function limitation.

Next, the Court addresses the parties’ arguments regarding the corresponding structure disclosed in the specification for carrying out the function. Originally, Floe contended that structure 74, shown in figures 3 and 10, of the specification, was the disclosed structure but agreed at the *Markman* hearing to use Newmans’ proposed construction, which asserts that the corresponding structure is illustrated in figures 3 and 10 and described in c. 5, ll: 20-40. Floe, however, added that it was important to emphasize to the jury that in c. 5, ll: 20-40, the ramp means is formed with the edge protection means. The preferred embodiment is described as follows in c. 5, ll: 20-40:

FIG. 3 is a cross-sectional view taken at line 3—2 in FIG. 1. and shows the shape of the rear channel member and ramp structure. The channel member 18 has a deck support surface 72 with a ramp structure 74

formed at one end thereof. The surface of ramp structure 74 is characteristically at about 45 degrees and has a deck protection surface 76 perpendicular to support surface 72. The other end of support surface 72 is formed at right angles with the back member 78. A lower member 80 is formed at about right angles with back member 78 and has lip member 82 formed at about 45 degrees from the other end thereof. These member [sic] form a channel that effectively protects the lights while having them readily visible from the rear. The general wall thickness is nominally 0.156 inch for a light-weight trailer, and can be lighter or heavier as needed for the designed trailer capacity. Channel member 18 can be 3.5 inch from bottom to deck bearing surface 72, and deck edge protection surface 76 will be high enough to cover the edge of the selected deck material. The added radius 84 below ramp surface 74 is provided for extra strength.

Having found that “ramp means” is a means-plus-function claim element, and consistent with the parties’ agreement, the Court finds that the corresponding structure is illustrated in figures 3 and 10 and described in c. 5, ll: 20-40.

2. “disposed between”

Floe contends that “disposed between” has the same meaning as in Claim 1. Newmans asserts that, for the same reasons stated with respect to Claim 1, “disposed between” in Claim 11 should be construed as “with one edge connected to the lower surface and the opposite edge connected to the upper edge of the edge protection means.” Consistent with the Court’s reasoning above, the Court construes this phrase as “arranged or placed in the space that separates two structures or points.”

3. “engaging”

Floe asserts that this term should be construed as “fitting together.” Newmans, on the other hand, contends that this term should be construed as “coming into contact with.” Floe contends that its proposed construction is consistent with the plain meaning of “engaging” as used in the claim. Newmans asserts that Claims 14 and 15 are instructive

as to how the Court should construe the term “engaging.” In particular, Newmans cites the description of the “lip means” in Claim 14, which provides “for engaging the loading surface when the frame structure is postured for loading.” (‘379 Patent, c. 8, ll: 47-49.) Newmans also points out that Claim 15 states, “An improved loading frame member as in claim 14. [sic] wherein said angle for engaging the surface is approximately forty-five degrees.” (*Id.* at ll: 50-52.) Further, Newmans cites the specification, which refers to figure 10 stating, “In this arrangement the lip surface 82 is in contact with the surface” (*Id.* at c. 6, ll: 35-37.) Therefore, according to Newmans, “engaging” means “coming into contact with.”

The term “engaging” appears in the “edge protection means” limitation, which states, “edge protection means coupled to said trailer bed support means for protecting the edge of the loading portion of the trailer bed, wherein said edge protection means has an upper edge and is positioned above and substantially perpendicular to said trailer bed support means for engaging the edge of the loading portion of the trailer bed[.]” (‘379 Patent, c. 8, ll: 18-24.) Consistent with how “engaging” is used in the claims and the specification, the Court construes “engaging” as “becoming interlocked with.”

4. **“formed with”**

Floe asserts that this phrase should be construed as “brought together or connected in a functional relationship.” Newmans, however, contends that it should be construed as “flowing directly from.” Floe alleges that its proposed construction is consistent with how “formed with” is used in the claim. Floe also asserts that it is improper to add modifiers, such as “directly,” when the modifiers are not recited in the claim. Newmans

supports its proposed construction by arguing that, in the prosecution history, the patentee specifically disclaimed any structure that does not flow directly from the protected deck edge. In particular, Newmans cites the patentee's characterization of the relationship between the "ramp means" and the "edge protection means" in an attempt to overcome a rejection based on Remde:

[The claimed invention has] a structure that is substantially different from that of Remde. The different structure has an advantageous resulting functionality in that the rear edge of the supported deck is protected, and the ramp flows directly from the deck surface and protected deck edge, rather than the separated structure shown by Remde.

(Frederick Decl., ¶ 3, Ex. B at FL000183.)

Here, Claim 11 states that the "ramp means" is "formed with said edge protection means for assisting in loading the vehicles when the frame structure is positioned for loading[.]" ('379 Patent, c. 8, ll: 26-28.) Thus, the Court finds that the meaning of "formed with" in the claim means "brought together or connected in a functional relationship." Furthermore, the Court rejects Newmans' contention that the patentee disclaimed embodiments wherein the ramp does not "flow[] directly from" the deck surface. After reviewing the relevant prosecution history, the Court finds that in distinguishing the structure of the claimed invention from that of Remde, the patentee was making the argument that the structures are not equivalents under a means-plus-function analysis. The Court does not find that the patentee was indicating what "formed with" means. Thus, the patentee did not disclaim any structure that does not flow directly from the protected deck edge. The Court therefore construes this phrase as "brought together or connected in a functional relationship."

5. “lower surface”

Floe asserts that this phrase should be construed as “a surface of a structure that is physically located toward the bottom of the structure.” Newmans, on the other hand, contends that this phrase should be construed as “a surface (not an edge) formed with the edge protection means, which is different from and positioned below the ramp surface.” Floe contends that its construction is consistent with the plain and ordinary meaning of “lower surface.” Floe also contends that the language of Claim 11 provides further support for rejecting Newmans’ proposed construction. Specifically, Floe contends that in Claim 11, the patentee stated when he intended something to be formed with the edge protection means. Thus, according to Floe, if the patentee had intended for the lower surface to always be formed with the edge protection means, he would have stated so.

Newmans asserts that the prosecution history contains a disclaimer of scope. Newmans points out that the Examiner allowed Claims 1 and 6 after the patentee added the phrase “lower portion” to these claims, but rejected Claim 11 before the phrase “lower surface” had been added to that claim. Newmans notes that at the time the patentee added the phrase “lower portion” to Claims 1 and 6, the patentee also added the phrase “lower portion” to Claim 14, which was dependent on Claim 11. Newmans further points out that the Examiner allowed Claim 11 after the patentee added the “ramp surface” that is “disposed between” the “lower surface” and the “upper edge” of the edge protection means to the claim. Thus, according to Newmans, “just as in Claims 1 and 6, Floe disclaimed any structure that “has one edge unconnected” with respect to Claim 11.” (Defendant’s Opening *Markman* Brief Regarding the ‘379 Patent at 39.) Newmans also

contends that the patent does not consider a “surface” an “edge,” and therefore, according to Newmans, the “lower surface” of the “ramp means” of Claim 11 is not simply the lower edge of the ramp surface.

The Court rejects Newmans’ disclaimer argument. The Court does not find that the patentee disclaimed the ordinary meaning of “lower surface” as a result of the patentee having added the phrase “lower surface” to dependent Claim 14 at the same time the patentee added “lower portion” to Claims 1 and 6. Such an argument is based on unsupported inferences, notwithstanding the fact that these phrases constitute two different limitations. Further, the Court rejects Newmans’ assertion that the patentee disclaimed any structure that “has one edge unconnected” with respect to Claim 11. The Court has already found that the patentee did not make any disclaimer with respect to Claims 1 and 6, and finds that this argument likewise fails with Claim 11 because there is no clear and unmistakable evidence of a disclaimer. The Court finds that the phrase “lower surface” should be construed with its ordinary meaning. Here, Claim 11 requires that “said ramp means has a lower surface and a ramp surface disposed between said lower surface and said upper edge at a first predetermined angle to said trailer bed support means[.]” (‘379 Patent, c. 8, ll: 28-31.) Thus, the Court construes “lower surface” as “a surface of a structure that is physically located toward the bottom of the structure.”

6. “edge”

Consistent with the Court’s reasoning above, the Court construes “edge” as “boundary or point where a surface begins or ends.”

7. “ramp”

Consistent with Court’s reasoning above, the Court construes “ramp” as “a uniformly sloping platform that provides ease of sliding objects onto a trailer deck.”

8. “a”

Consistent with Court’s reasoning above, the Court construes “a ramp surface” as “one ramp surface.”

9. “angle”

Consistent with the Court’s reasoning above, the Court construes “angle” as “a geometric figure or arithmetic quantity defined by two rays emanating from a common point or by two planes emanating from a common line.”

Conclusion

Therefore, **IT IS HEREBY ORDERED** that:

1. The claims at issue are construed as set forth in this Order.

Dated: June 21, 2006

s/Donovan W. Frank
DONOVAN W. FRANK
Judge of United States District Court